



Faceting 101 - Exam 1

SRB Deluxe

by Arya Akhavan (October 2012)

Angles for R.I. = 1.580

121 + 24 girdles = 145 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.526 U/W = 0.526

P/W = 0.463 C/W = 0.145

Vol./W³ = 0.204

PAVILION

P1	45.08°	06-18-30-42-54-66-78-90	Cut to centerpoint. (Use all G1 indices.)
G1	90.00°	02-06-10-14-18-22-26-30-34-38-42-46-50-54-58-62-66-70-74-78-82-86-90-94	Set stone size.
P2	44.01°	02-10-14-22-26-34-38-46-50-58-62-70-74-82-86-94	Overwrite some P1 facets (level girdle)
P3	43.06°	01-11-13-23-25-35-37-47-49-59-61-71-73-83-85-95	Meet G1, P2
P4	42.06°	02-10-14-22-26-34-38-46-50-58-62-70-74-82-86-94	Meet P1, P2, P3

CROWN

C1	32.79°	02-10-14-22-26-34-38-46-50-58-62-70-74-82-86-94	Set girdle width.
C2	34.44°	06-18-30-42-54-66-78-90	Level girdle.
C3	31.49°	01-11-13-23-25-35-37-47-49-59-61-71-73-83-85-95	Meet G1, C1
C4	27.54°	02-10-14-22-26-34-38-46-50-58-62-70-74-82-86-94	Meet C1, C2, C3
C5	23.39°	06-18-30-42-54-66-78-90	Meet C1, C2, C3, C4
T	0.00°	Table	Meet C3, C4

Your first exam is a modification of the Standard Round Brilliant that uses most of the modifications used to scale the design up for larger stones. This exam tests cutting to a centerpoint, cutting an equal level girdle, cutting multiple facets to and from the same meet, and cutting more than 100 facets.

Exam rules: cut in golden beryl, with W = 10 mm (+/- 0.5 mm) and G = 0.3 mm (+/- 0.1 mm)

C:\Program Files (x86)\GemCAD\Designs (Mine)\Teaching Series\Faceting 101 - Exam 1 - SRB Deluxe.gem